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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,559

03/30/2004

Jeffrey G. Gibson

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EXAMINER

JOHNSON, MATTHEW A

ART UNIT

PAPER NUMBER

3682

MAIL DATE

DELIVERY MODE

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/814,559	Applicant(s) GIBSON, JEFFREY G.	
	Examiner Matthew Johnson	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/2007 and 1/30/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8, 13, 15, 27 and 28, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clms 8, 13 27 and 28: Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "dash" in claims 8, 13, 27 and 28, is used by the claim to mean "firewall", while the accepted meaning is "instrument panel." The term is indefinite because the specification does not clearly redefine the term.

Re clm 15: Claim 15 depends from claim 1 and recites the limitation, "an electronic control unit configured to receive the output signal from the force measuring sensor". Amended claim 1 recites the limitation, "an electronic control unit connected to the force measuring sensor and configured to receive the output signal". It is unclear if the applicant intends to claim an additional electronic control unit, or if claim 15 is referring to the same electronic control unit previously recited in claim 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6, 9-13, 15-18, 22-24 and 27, are rejected under 35 U.S.C. 102(b) as being anticipated by Gray et al. (USP-4,970,486).

Re clms 1, 6, 12, 13, 15-17 and 27: Gray discloses a(n):

- Suspended Foot-engaging member/pedal (12) mounted to a front of dash of a vehicle (28) and configured to be engaged by a foot of a user, the foot engaging member configured to remain substantially stationary when engaged by a foot of a user (C1 L66)
- Force measuring sensor (50) secured to and exterior surface (52) of foot engaging member/pedal (12) and configured to provide an output signal based on a force applied by a foot of a user (C1 L40-47)
- Electronic control unit (20) connected to the force measuring sensor (50) and configured to receive the output signal and output a control signal (C2 L39-43)
- Cable (Fig. 1)

Re clms 2 and 18: Gray discloses a force measuring sensor (50) comprising a strain gauge (C2 L63).

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Re clms 9-11 and 22-24: Gray discloses a foot engaging member (12) that can be used as an accelerator pedal, brake pedal or a clutch pedal. (C2 L21-27 and C1 L40-47)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 4, 6-17, 19, 20, and 22-28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (USP-6,655,199) in view of Gray et al. (USP-4,970,486).

Re clms 1, 6, 17 and 27: Smith discloses a drive by wire assembly for a motor vehicle comprising a(n):

- Foot-engaging member/pedal (12) mounted to a front of dash of a vehicle (17) and configured to be engaged by a foot of a user, the foot engaging member configured to remain substantially stationary when engaged by a foot of a user (C4 L8-12)
- Force measuring sensor (24) secured to foot engaging member/pedal (12) and configured to provide an output signal based on a force applied by a foot of a user (C2 L30-34 & L47-53)

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- Electronic control unit (30) connected to the force measuring sensor (24) and configured to receive the output signal and output a control signal (C2 L47-63)

Smith does not explicitly disclose that the force measuring sensor is secured to an exterior surface of the foot engaging member.

Gray teaches a force measuring sensor (50) secured to an exterior surface (52) of a foot engaging member (12).

Since the applicant is silent with respect to any criticality or unexpected results from having the force measuring sensor secured to an exterior surface of the foot engaging member, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Smith and provide a force measuring sensor secured to an exterior surface of the foot engaging member, as taught by Gray, as a matter of design choice, as it appears that the device of Smith would function equally well with such an arrangement.

Re clms 3, 4, 19 and 20: Smith discloses a force measuring sensor (24) comprising either a load cell or a Hall-effect sensor (C2 L34-36) (Note: according to Omega.com, a load cell manufacturer, a piezoelectric is a type of load cell)

Re clms 7-16, and 22-24: Smith discloses a drive by wire assembly for a motor vehicle wherein:

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- The foot engaging member (12) is a suspended pedal with an arm (18) having a foot pad (20) secured on the first end, and a second end secured to a mounting member (14) that is mounted to a front of dash of a vehicle (17)
- The foot engaging member comprises a cover (20) for the foot engaging member (C2 L26-29)
- The electronic control unit (30) connected to the force measuring sensor (24) and configured to receive the output signal and output a control signal (C2 L47-63)
- Cable (40)

Re clms 25 and 26: Smith discloses that the output signal is transmitted to a throttle assembly or a brake system (C2 L53-63).

Re clm 28: Smith discloses a pedal having a first free end (20) and a second end (14) secured to the front of dash (17).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (USP-6,655,199) in view of Yamaki et al. (USP-6,633,157).

Re clms 5 and 21: Smith discloses all of the claimed subject matter as described above.

Smith does not disclose that a spring and magnet assembly excites the Hall-effect sensor.

Yamaki et al teaches a Hall-effect sensor excited by a magnet and a spring for the purpose of increasing the accuracy of detection of a displacement (C2 L56-67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to excite the Hall-effect sensor in the device of Smith, using a magnet and a spring as taught by Yamaki, for the purpose of increasing the accuracy of detection of a displacement (C2 L56-67).

9. Claims 2 and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (USP-6,655,199) in view of Mendis (USP-6,571,662).

Smith discloses all of the claimed subject matter as described above.

Smith does not disclose a force measuring sensor comprising a strain gauge.

Mendis teaches the use of a strain gauge (18) in a drive by wire force measuring pedal for the purpose of measuring the amount of flexure of the pedal (2) (C2 L42-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a strain gauge, as taught by Mendis, in the device of Smith for the purpose of measuring the amount of flexure of the pedal (C2 L42-45).

Response to Arguments

10. Applicant's arguments with respect to claims 1 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments regarding claims 2 and 18 have been fully considered but they are not persuasive.

The applicant argues that the combination of Smith and Mendis is improper because Smith teaches away from the proposed combination. Specifically, the applicant states that Smith discloses a pedal that is non-movably mounted in the vehicle, while the pedal of Mendis is designed to move.

In response, the examiner disagrees with the applicant's arguments. The Mendis reference is cited by the examiner as teaching the use of a strain gauge as the force measuring sensor for the pedal. The fact that the sensor is employed on a pedal that moves, is not relevant to the teaching. The examiner has previously cited Smith as disclosing a pedal that remains substantially stationary. Accordingly, this aspect of the invention is not being taught by Mendis, and the strain gauge would still function properly in either application.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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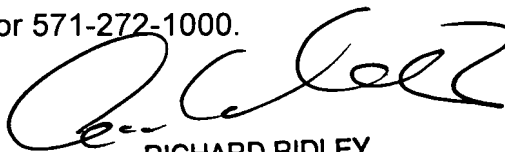
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Johnson whose telephone number is 571-272-6917. The examiner can normally be reached on Monday - Friday 8:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ 5/30/2007


RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER